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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/519,914	01/03/2005	Koichi Sato	03500.017360 3004		
5514 FITZPATRICK	7590 09/20/2007 CELLA HARPER & SCI	EXAMINER			
30 ROCKEFELLER PLAZA			CHEUNG, WILLIAM K		
NEW YORK, NY 10112			ART UNIT	PAPER NUMBER	
			1713		
			MAIL DATE	DELIVERY MODE	
			09/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	·	Application	No.	Applicant(s)				
Office Action Summary		10/519,914		SATO ET AL.				
		Examiner		Art Unit				
		William K. Ch	neung	1713				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address								
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,								
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on 29 June 2007.							
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.							
•	·							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠	4)⊠ Claim(s) <u>1,2,5,6,8 and 11-19</u> is/are pending in the application.							
4	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
·	Claim(s) <u>1,2,5,6,8 and 11-19</u> is/are rejected.							
-	Claim(s) is/are objected to.	- alastian ras	vironont					
8)	Claim(s) are subject to restriction and/or	r election requ	uirement.					
Application Papers								
9)[] 7	The specification is objected to by the Examine	r.		•				
. 10)□ 7	Γhe drawing(s) filed on is/are: a)∏ acc∈	epted or b)	objected to by the E	xaminer.				
	Applicant may not request that any objection to the	- '	4 4					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)[]	The oath or declaration is objected to by the Ex	aminer. Note	the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
•				•				
Attachment(s)								
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date.								
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:								

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## **DETAILED ACTION**

- 1. In view of the amendment filed June 29, 2007, claims 3, 4, 7, 9, 10 have been cancelled. Claims 1, 2, 5, 6, 8, 11-19 are pending.
- 2. In view of the amendment filed June 29, 2007, the rejection of Claims 1-19 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Donald et al. (US 6,306,994 B1), is withdrawn.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 2, 5, 6, 8, 11-19 are rejected under 35 U.S.C. 103(a) as obvious over Sano et al. (US 2003/0144377 A1).

Sano et al. (page 13, claim 7) disclose a ABC type triblock copolymer comprising block A that is hydrophobic, Block B that is hydrophobic with other monomers added, and Block C that can be freely chosen. Since Block C can be freely chosen, Block C can also be chosen to be the hydrophilic since Block A is already hydrophobic.

Regarding hydrophilic monomers, Sano et al. (page 4, 0078) disclose a block unit comprising ethylenic monomer containing ionizable groups including carboxylic acid functionalities.

The difference between the invention of claims 1, 2, 5, 6, 8, 11-19 and Sano et al. is that the hydrophilic monomers of Sano et al. are silent on the ether spacer group between the polymer maintain chain and the carboxylic acid group of formula (1) of claim 1.

Since Sano et al. (page 4, 0078) disclose a block unit comprising ethylenic monomer containing ionizable groups including carboxylic acid functionalities, Sano et al. teach a family of compounds that generically include the compound as claimed (formula (1) of claim 1). Motivated by the expectation of success of obtaining the ABC triblock copolymers of Sano et al., it would have been obvious to one of ordinary skill in

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art to recognize and appreciate any ethylenic monomer containing ionizable groups including carboxylic acid functionalities, such as the formula (1) of claim 1 to obtain the invention of claims 1, 2, 5, 6, 8, 11-19.

## **Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571)

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272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William K. Cheung, Ph. D.

**Primary Examiner** 

WILLIAM K. CHEUNG PRIMARY EXAMINER

September 13, 2007